



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,454	01/04/2001	Joseph P. Quinn	JPQ-101	3633

7590 07/23/2002

Joseph P. Quinn, Esq.  
BROWN RUDNICK FREED & GESMER  
One Financial Center-18th Floor  
Boston, MA 02111

EXAMINER

NGUYEN, TAI T

ART UNIT PAPER NUMBER

2632

DATE MAILED: 07/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/754,454

Applicant(s)

Joseph P. Quinn

Examiner

Tai T. Nguyen

Art Unit

2632



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2632

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 9-10, 12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmitt et al. (US 5,910,782).

Regarding claim 1, Schmitt et al. disclose an on-board vehicle parking space finder service system including all subject matters as follow:

at least one object detector (16, as shown in Figure 1);

at least one processor (26) in communication with the at least one object detector (16) and receiving space occupancy information therefrom, wherein said at least one processor (26) is also in communication with a data distribution network (25, as shown in Figure 1); and

a database accessible by said processor (26) wherein said database includes a list of space identifiers associated with corresponding space occupancy information (as shown in Figure 1; col. 2, lines 22-63).

Regarding claims 2-3, Schmitt et al. disclose the system further comprising means (32) for geographically displaying space occupancy data incorporates at least one electronic map database

Art Unit: 2632

(51, 52) such that space occupancy data is displayed at a map position indicative of said space location (as shown in Figures 1 and 5; col. 4, line 65 through col. 5, line 8).

Regarding claim 4, Schmitt et al. disclose the at least one detector is an ultrasonic metal sensor capable of detecting the presence or absence of an automobile in a parking space (as shown in Figure 1; col. 2, lines 41-46).

Regarding claim 9, refer to claim 1 above, Schmitt et al. disclose all of the limitations as claimed shows in Figure 1; col. 2, line 21-67 and col. 3, lines 1-54).

Regarding claim 10, Schmitt et al. disclose the network is a publicly accessible network (25, as shown in Figure 1).

Regarding claim 12, Schmitt et al. disclose the at least one vehicle detector is disposed in a parking mater (15, as shown in Figure 1).

Regarding claim 16, Schmitt et al. disclose the at least one vehicle detector is an ultrasonic metal detector (as shown in Figure 1; col. 2, lines 41-46).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2632

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et al. in view of Yoo et al. (US 6,107,942).

Regarding claim 5, Schmitt et al. discloses the instant claimed invention except for: the at least one object detector is a machine vision system. Yoo et al. teach a camera (23) for detecting the presence or absence of automobile in a parking spaces (as shown in Figure 3; col. 3, lines 1-23). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to utilize the camera as taught by Yoo et al. into the system as disclose by Schmitt et al. because it does the same function of detecting presence or absence of an automobile parking or leaving the parking spaces in order to generate an occupant or vacant signal to the database.

5. Claims 6-8, 11, 13-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et al.

Regarding claims 6-7, since Schmitt et al. disclose the at least one processor is a general purpose computer system (26) that is programmed to maintain said database with all of the state information for the parking meters in a given area, wherein the parking meters are configured to send ID information instead of location information, the database may be organized such that reference is made to the different parking meters by their respective IDs (as shown in Figure 1; col. 2, lines 47-63). It would have been obvious to a person having ordinary skill in the art that the computer (26) maintains the database and periodically update said database by reading space

Art Unit: 2632

occupancy data and corresponding space identifiers from the at least one object detector and writing the space occupancy data and corresponding space identifiers to the database in order to verify which parking meters are vacant or occupant.

Regarding claim 8, Schmitt et al. disclose the data distribution network in the form of a central site (25) that is used to receive a change data message (20) from the parking meter (15) and transmit a parking space availability message (40) to a parking requested vehicle (30, as shown in Figure 1). It would have been obvious to a person having ordinary skill in the art that the Internet can be used instead the central site (25) to enable the computer (26) and an on-board computer (31) communicates to each other for exchanging information about the parking availability.

Regarding claim 11, refer to claim 8 above.

Regarding claims 13-15, since Schmitt et al. disclose the at least one communication link is RF transmission (as shown in figure 1). It would have been obvious to a person having ordinary skill in the art that other communication links can be used for communication between two locations in order to transmit and receiving a data package to one and the other.

Regarding claims 17-20, the claimed method steps would have been inherent in the product structure.

Art Unit: 2632

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoshida (US 5,877,704); Hassett (US 5,751,973); Kersken et al (US 5,748,107) and Kakiyara et al. (US 5,293,163).

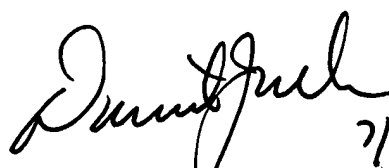
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai T. Nguyen whose telephone number is (703) 308-0160. The examiner can normally be reached on Monday to Friday from 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass, can be reached on (703)305-4717. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Examiner: Tai T. Nguyen

Date: July 20, 2002

  
7/22/02  
DANIEL J. WU  
PRIMARY EXAMINER